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L1 ANSWER 1 OF 1 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1997-246368 [23] WPIDS  
 DOC. NO. CPI: C1997-080023  
 TITLE: Mutant serine acetyl transferase enzymes - and recombinant microorganisms for producing O-acetyl serine, L-cysteine or L-cysteine derivatives.  
 DERWENT CLASS: B05 D11 D13 D16 D21 E16  
 INVENTOR(S): HEINRICH, P; LEINFELDER, W  
 PATENT ASSIGNEE(S): (CONE) CONSORTIUM ELEKTROCHEM IND GMBH  
 COUNTRY COUNT: 28  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
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DE 19539952	A1	19970430 (199723)*		50	C12N015-54	
WO 9715673 A1 19970501 (199723) GE 83 C12N015-54 <--						
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE						
W: BR CA CN CZ HU JP KR MX PL US						
CZ 9801269 A3 19980715 (199835)					C12N015-54	
EP 858510 A1 19980819 (199837) GE					C12N015-54	
R: AT BE CH DE DK ES FI FR GB IT LI NL						
CN 1200764 A 19981202 (199916)					C12N015-54	
HU 9900078 A2 19990428 (199924)					C12N015-54	
BR 9610910 A 19990713 (199939)					C12N015-54	
MX 9803317 A1 19980901 (200017)					C12N015-54	
JP 2000504926 W 20000425 (200031)			85		C12N015-09	
KR 99067120 A 19990816 (200045)					C12N015-54	
US 6218168 B1 20010417 (200123)					C12N001-20	
EP 858510 B1 20011219 (200206) GE					C12N015-54	
R: AT BE CH DE DK ES FI FR GB IT LI NL						
KR 275287 B 20010201 (200210)					C12N015-54	
DE 59608521 G 20020131 (200216)					C12N015-54	
CA 2235752 C 20020416 (200234) EN					C12N015-54	
ES 2169269 T3 20020701 (200253)					C12N015-54	
JP 3329825 B2 20020930 (200271)			34		C12N015-09	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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DE 19539952	A1	DE 1995-19539952	19951026
WO 9715673	A1	WO 1996-EP4613	19961024
CZ 9801269	A3	WO 1996-EP4613	19961024
		CZ 1998-1269	19961024
EP 858510	A1	EP 1996-937217	19961024
		WO 1996-EP4613	19961024
CN 1200764	A	CN 1996-197894	19961024
HU 9900078	A2	WO 1996-EP4613	19961024
		HU 1999-78	19961024
BR 9610910	A	BR 1996-10910	19961024
		WO 1996-EP4613	19961024
MX 9803317	A1	MX 1998-3317	19980427
JP 2000504926	W	WO 1996-EP4613	19961024
		JP 1997-516282	19961024
KR 99067120	A	WO 1996-EP4613	19961024
		KR 1998-703063	19980427
US 6218168	B1	WO 1996-EP4613	19961024
		US 1998-65104	19980513
EP 858510	B1	EP 1996-937217	19961024
		WO 1996-EP4613	19961024

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KR 275287	B	WO 1996-EP4613	19961024
		KR 1998-703063	19980427
DE 59608521	G	DE 1996-508521	19961024
		EP 1996-937217	19961024
		WO 1996-EP4613	19961024
CA 2235752	C	CA 1996-2235752	19961024
		WO 1996-EP4613	19961024
ES 2169269	T3	EP 1996-937217	19961024
JP 3329825	B2	WO 1996-EP4613	19961024
		JP 1997-516282	19961024

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
CZ 9801269	A3 Based on	WO 9715673
EP 858510	A1 Based on	WO 9715673
HU 9900078	A2 Based on	WO 9715673
BR 9610910	A Based on	WO 9715673
JP 2000504926	W Based on	WO 9715673
KR 99067120	A Based on	WO 9715673
US 6218168	B1 Based on	WO 9715673
EP 858510	B1 Based on	WO 9715673
KR 275287	B Previous Publ.	KR 99067120
	Based on	WO 9715673
DE 59608521	G Based on	EP 858510
	Based on	WO 9715673
CA 2235752	C Based on	WO 9715673
ES 2169269	T3 Based on	EP 858510
JP 3329825	B2 Previous Publ.	JP 200004926
	Based on	WO 9715673

PRIORITY APPLN. INFO: DE 1995-19539952 19951026

REFERENCE PATENTS: 2.Jnl.Ref

INT. PATENT CLASSIF.:

MAIN:	C12N001-20; C12N015-09; C12N015-54
SECONDARY:	C07C229-08; C07C323-58; C07H021-04; C07K001-00;
	C12N001-00; C12N001-15; C12N001-19; C12N001-21;
	C12N005-10; C12N009-10; C12N015-00; C12P013-06;
	C12P013-12
INDEX:	C12N001-21, C12R001:19; C12N001-21, C12R001:15;
	C12P013-12, C12R001:15

BASIC ABSTRACT:

DE 19539952 A UPAB: 19970606

Novel mutant serine acetyltransferase proteins, comprise the 273 residue wild type amino acid sequence given in the specification with at least 1 amino acid substitution between residues 97-273 or at least 1 amino acid deletion in the C-terminal region from residue 227, excluding the substitution Met256Ile. Also claimed are: (1) DNA sequence encoding a protein as above; and (2) microorganisms whose cysteine metabolism is deregulated by at least 1 such DNA sequence.

USE - O-acetylserine, L-cysteine or L-cysteine derivatives can be produced by culturing the microorganisms in a nutrient medium, preferably containing a sulphur donor, especially thiosulphate (claimed). L-Cysteine is used in pharmaceuticals to treat bronchial disorders, cosmetics in shampoos and permanent waving lotions and foods as an antioxidant, flavour enhancer and dough processing additive.

ADVANTAGE - The mutant enzymes are less sensitive to L-cysteine inhibition compared with the wild-type enzyme.

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FILE SEGMENT:

CPI

FIELD AVAILABILITY:

AB; DCN

MANUAL CODES:

CPI: B04-E02F; B04-F0100E; B04-L0400E; B10-B02D;  
B10-B02J; D01-B01; D03-H01B; D03-H01P; D05-C03D;  
D05-H12B2; D05-H14A; D05-H17B3; D08-B04; D08-B05;  
D08-B11; E10-B02